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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,605	12/23/2003	Wee Song, Steve Loy	BCONP2003-13	1604

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EXAMINER
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JARRETT, RYAN A

ART UNIT	PAPER NUMBER
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2121

MAIL DATE	DELIVERY MODE
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03/31/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/707,605	LOY ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ryan A. Jarrett	2121	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 February 2008.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 12-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 12-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/18/04</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election without traverse of claims 1 and 12-15 in the reply filed on 02/18/08 is acknowledged.

Applicant has cancelled claims 2-11 and 16-20.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 and 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shanmugasundram et al. US 2002/0199082.

**1. A method of automating validation comprising:**

**defining requirements** (e.g., [0079]: “desired wafer result target(s)”);

**selecting automated devices for manufacturing** (e.g., [0061]: “selected chambers”, [0083], Fig. 19);

**integrating automated devices in a production line** (e.g., Fig. 19, Fig. 20), **wherein integrating the automated devices comprises interconnecting the automated devices to a hub-box** (e.g., Figs. 17-19 #1701, Fig. 20 #2001) **via communication links, the hub-box**

**controls and facilitates communication between automated devices** (e.g., [0084]: “The controller 2001 communicates with the process tools 2005 via a fab message bus 2003 using SECS protocol”);

**collecting processing data from the automated devices by the hub-box for analysis** (e.g., [0081]: “remote viewing of the process tools”);

**analyzing processing data to determine whether the requirements are satisfied** (e.g., [0081]: “The level of commonality of the chambers and the results can be analyzed, preferably by the SMC 1701”); **and**

**validating the process if the requirements are satisfied** (e.g., Fig. 9, [0064]-[0065]: “The results in the graph of Fig. 9 confirm that although the thickness is converging to the target value, this did not have any detrimental impact on the stress or the RI”, [0074]: “The model computes what the result should have been, compares it to the actual result, and determines a different set of processing conditions, if any, that would theoretically meet the target”).

**12. The method of claim 1 further comprises providing a generic interface unit** (e.g., Fig. 20 #2011: SECS, [0079]: “generic equipment model ('GEM')/SECS interface”) **for facilitating communication between the hub-box and automated modules.**

**13. The method of claim 12 wherein providing the generic interface unit comprises providing a generic interface for each automated module** (e.g., Fig. 20).

**14. The method of claim 13 wherein the generic interface includes communication links for each automated device of the automated module** (e.g., Fig. 20).

**15. The method of claim 12 wherein the generic interface includes communication links for each automated device of the automated module** (e.g., Fig. 20).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan A. Jarrett whose telephone number is (571) 272-3742. The examiner can normally be reached on 10:00-6:30 M-F.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ryan A. Jarrett/  
Primary Examiner, Art Unit 2121

03/14/08